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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,688

12/15/2003

Shawn A. Ruden

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8139

7590 10/25/2007
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EXAMINER

TUGBANG, ANTHONY D

ART UNIT

PAPER NUMBER

3729

MAIL DATE

DELIVERY MODE

10/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/743,688

Applicant(s)

RUDEN ET AL.

Examiner

A. Dexter Tugbang

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 and 21-39 is/are pending in the application.
- 4a) Of the above claim(s) 24, 25, 28, 29, 34, 35 and 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19, 21-23, 26, 27, 30-33 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/15/03.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the invention of Group I, Claims 21 through 23 and 31 through 33, in the reply filed on August 8, 2007 is acknowledged.
2. Claims 24, 25, 28, 29, 34, 35 and 37 through 39 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 8, 2007.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --A Process for Aligning a Disc Member on a Rotatable Hub--.

Claim Objections

4. Claims 22 and 23 are objected to because of the following informalities.

In Claim 22, "the first and second" (line 4) should be changed to --a first and second--.

In Claim 23, "the first and second" (lines 5-6) should be changed to --a first and second--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 19, 21, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al 6,158,112 and Inouye 4,068,267.

Kim discloses a method comprising: providing a hub (e.g. 2b) with a central axis, the hub supporting a disc member (e.g. 1) having an annular track with a center of rotation initially offset from the central axis of the hub when the disc member is away from the hub; and imparting a bias force on the disc member to align the center of rotation of the track with the central axis by contactingly engaging the disc member with a flexible cantilevered finger (e.g. 15, 16) of a biasing tool (e.g. 11).

The disc members of Kim inherently have at least one annular track in order for the disc member to operate in a disk drive environment. As evidence of inherency, Inouye is cited to prove that disc members have at least one annular track (i.e. data tracks 21), as shown in Figures 2 and 3.

Regarding Claim(s) 25, Kim further teaches (shown in Fig. 9) a first disc member and a second disc member wherein the bias force is imparted on the first disc member with a first finger and the bias force is imparted on the second disc member with a second finger.

Regarding Claim(s) 26 and 27, Kim further teaches that the finger comprises a proximal end (front surface of 16), which extends from a main body portion in a first direction (i.e. vertical

direction) and a disc engagement region (body of 16), which extends from a distal end of the finger in a second direction (i.e. horizontal direction).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 30, 31 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al in view of Fukaya et al 4,748,524.

In Claims 30, 31 and 36, Kim discloses the claimed manufacturing method as these claims correspond to Claims 19, 21 and 26, respectively. However, Kim does not teach that each disc member has an annular track with a track center offset from a center of the disc member (as required at lines 2-3 of Claim 30).

Fukaya shows a disc member with a center (e.g. O) of the disc member and annular tracks (e.g. A, B) with a track center (e.g. O') that is offset from the center of the disc member (shown in Fig. 1). To utilize such a disc member of Fukaya allows for positional adjustment and inspection of a magnetic head in a disc drive (col. 1, lines 8+).

It would have obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Kim by utilizing each disc member with a track center offset from a center of the disc member, as taught by Fukaya, to advantageously allow for positional adjustments and inspection of magnetic head and the disc drive.

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9. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al and Inouye in view of Yoo et al 6,971,154.

Kim and Inouye disclose the claimed manufacturing method as relied upon above in Claims 19 and 21.

Regarding Claim(s) 22, one of the push pins 16 of Kim can be read as the claimed “main body portion” that advances toward the central axis.

Regarding Claim(s) 23, two different push pins 16 of Kim can be read as the claimed “first main body portion” and “second main body portion”, respectively, as each advances toward the central axis.

Kim does not teach concurrently deflecting first and second biasing members.

Yoo teaches a main body portion (e.g. 230 in Fig. 6) that advances toward a central axis of a disc member and concurrently and independently deflects first and second biasing members (e.g. 241, 243, col. 5, lines 3-26). The purpose of the main body portion and first and second biasing members of Yoo is to balance and align disc members (col. 2, lines 29+).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to have modified each main body portion of Kim by adding the first and second biasing members, as taught by Yoo, to advantageously balance and align each disc member.

10. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al in view of Fukaya et al, as applied to Claims 30 and 31 above, and further in view of Yoo et al, for the same reasons set forth in paragraph 9 above. Note that Claim 32 corresponds to Claim 22 and Claim 33 corresponds to Claim 23, respectively.

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570.

The examiner can normally be reached on Monday - Friday 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/A. Dexter Tugbang/
Primary Examiner
Art Unit 3729**

October 19, 2007